

## Research Paper

# **In-Depth Review of Microeconomic Analysis of Business Tourist Spending**

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**Abstract:** Most prior research used tourist arrivals to examine international tourism demand. However, tourist arrival is not an accurate factor to determine international tourism demand as it does not show the actual spending pattern of tourists which includes goods and services purchased. Literature has proven that business tourists always spend more than leisure tourists; thus, tourist expenditure is an essential measure of international tourism demand. For the current research, we summarised 31 studies to review several variables that could affect tourism demand and expenditure. The current research concludes that microeconomic modelling should be the focus and given priority for studying tourism demand and the factors that affect business tourist expenditure.

**Keywords:** Business tourists, spending, destination-related factors, microeconomic analysis, psychological factors, economic modelling destination atmospherics, zone of tolerance, tourist

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## **Introduction**

Studies that use figures of tourist arrivals to examine international tourism demand fail to take into account that tourism is not a single product; it includes a range of goods and services purchased by tourists. Further, the purchasing behaviour and power vary from tourist to tourist depending on factors such as demographics, length of stay, accommodation used, mode of travel, purpose of visit, alone or in a group

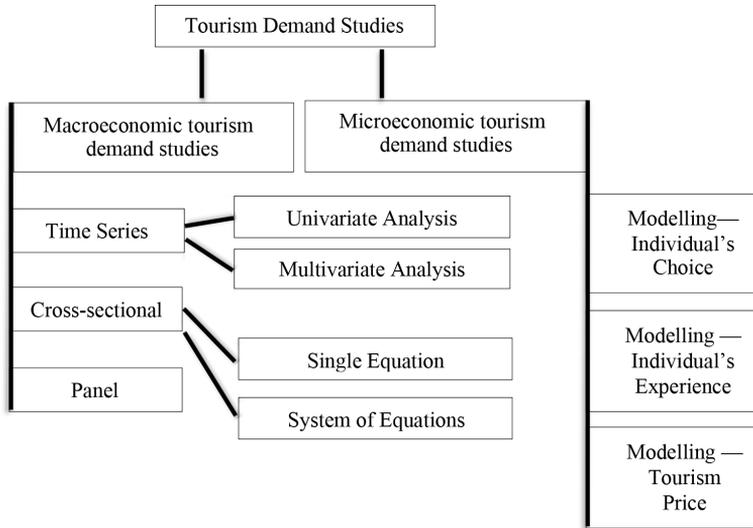
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and many others (Song & Witt, 2000; Song & Li, 2008; Kumar & Hussain, 2014a). All these factors lead to variations in tourist expenditure. Hence, tourist arrival by itself is not an accurate measure to determine international tourism demand as it does not show the actual spending pattern of tourists. It is a well-known fact that business tourists always spend more than leisure tourists. A study on international passengers in 2000 by the United Kingdom revealed that 851,000 conference delegates brought in £591 million in income; per capita spending was £694 compared to an average leisure visitor who spends £507 and a business tourist who spends £554. Similarly, exhibition visitors spend £151, which is three times higher than the average all other types of visitors (Business Tourism Partnership, 2003; Hussain, Ari Ragavan, Kumar, & Nayve, 2014). If we look at the total number of international tourists since 1990, almost 15% were travelling for business purposes; this translates to 145 million worldwide in 2012 and 139.3 million in 2011 (UNWTO, 2013, 2015).

It is essential to understand tourist expenditure because tourism is a crucial industry that drives many economies. In addition, utilisation of tourism is the focal point of the financial estimation of tourism and the financial effects of tourism (Mihalic, 2002). Studies of tourism demand which dominate financial planning at the national level requires aggregate data including that of total arrivals and expenditure in a particular destination (Lim, 2006). This identifies with a high level of fluctuation in cross-sectional data, which makes displaying an individual's interest for an item more overwhelming and less precise than demonstrating the interest for a group of individuals. Accumulation tends to normal out individual characteristics and therefore, as the level of collection increases, both the unwavering quality and exactness of the model move forward. All things considered, utilisation of very aggregated information is less significant to tourism planning and strategy making than those in possession of information of a lower level of accumulation (Smith, 1995).

This review of microeconomic tourism demand studies identified several that used expenditure as a measurement of an individual's demand for tourism. The following sections present these studies in terms of sample size, modelling method, as well as the dependent and independent variables used. Even though macro- and microeconomic studies serve different purposes, microeconomic models have three advantages over macroeconomic models (Alegre & Pou, 2004). Firstly, the models do not stray too far from theoretical economic consumer models. Secondly, they allow for the control of participation bias, which could be incorporated while the analysis is taking place for aggregated data. Thirdly, they acknowledge the diversity and heterogeneity of consumer behaviours, which are ignored in studies that use highly aggregated data. Figure 1 shows a summary of the number of empirical studies undertaken on international tourism demand to explain the possible factors that influence tourist flows worldwide.



**Figure 1** Types of tourism demand studies

Therefore, business tourist’s expenditure is an important measure of international tourism demand. The aim of the paper is to review several tourism/business tourism expenditure studies focusing especially on micro areas of expenditure, model specification, sample size as well as dependent and independent variables. The study finds that microeconomic modelling should be the focus and priority for understanding tourism demand and the factors that affect business tourist expenditure including psychological and destination-related factors.

**Review of Literature**

**Tourism Demand and Type of Products**

Tourism demand can be predicted at the macro- or microeconomic level. For the macroeconomic level, analyses require aggregated demand, including time series or cross-sectional analysis (Hanke, Wichern, & Reitsch, 2001). For time series analysis, a big sample size is required (Lim, 1997) while cross-sectional analysis works by collecting data at a single point in time across a number of units to compare tourism demand across regions/countries at one point in time instead of over time periods.

There are twelve (12) sub-sectors, which help to design tourism-related products as acknowledged by UNWTO (2006). These sub-sectors are hotels, second home, restaurants, rail services, road services, air transport services, water transport services, transport supporting services, transport equipment rental, travel agencies, cultural services, and sporting/recreational activities. All the sub-sectors can be categorised into three types of products as follows.

*Tourism Characteristic Products* are products whose consumption goes down significantly once tourists stop visiting a destination. *Tourism Connected Products* are products known as tourism-related in a particular country but not on a worldwide basis. *Tourism Specific Products* are also known as tourism-related products and they are a combination of tourism characteristic and tourism connected products.

### Microeconomic Analysis of Business Tourist Spending

As business tourism is an economic activity that generates income, it is vital to understand the patterns of business tourist spending. This pattern of spending or expenditure can help measure the economic impact of business tourism on a nation's economy and a particular destination (Kumar & Hussain, 2014b). Even though macro- and microeconomic studies serve different purposes (Alegre & Pou, 2004), Lim (2006) contended that there is a need for more microeconomic studies in this area which is inundated with macroeconomic studies. Very few microeconomic studies have used spending as the measurement for studying tourism demand.

**Table 1** Number of studies and year of publication

Year	Number of studies
1995 and prior years	5
1996 – 2000	5
2001 – 2005	13
2006 – 2010	4
2010 and subsequent years	4
Total	31

### Sample Size and Modelling Methods

For a microeconomic analysis of business tourist spending, it is very important to work with similar-sized samples. Prior studies used varied sample sizes with a majority of them having less than 1,500 observations. Some studies worked on survey data collected by researchers or tourism bureaus for other purposes and the sample sizes reported sometimes refer to the total number of questionnaires received rather than the number of cases used in a modelling (Moisey, Yuan, & McCool, 1990).

**Table 2** Distribution of study sample sizes

<b>Sample size/observations</b>	<b>Number of studies</b>
300 – 500	8
501 – 1000	5
1,001 – 1500	6
1,501 – 2000	10
2,001 and more	2
Total	31

Multiple regression models were found to be the most widely used model in studies. The researcher can conduct separate exploration for individual or joint effects of two or more than two individual variables on business tourist spending (Nicolau & Más, 2005).

**Table 3** Modelling method used

<b>Modelling method</b>	<b>Number of studies</b>
Multiple Regression Models	13
Tobit Regression Models	6
Equations	2
General Linear Models	4
Money Generation Models	1
Path Analysis	3
Structural Equation Models	2
Total	31

### **Dependent Variable — Spending**

In microeconomic analysis, business tourist spending can be used as the dependent variable. There are several categories of spending, varying from 4 to 20. Kumar and Hussain (2014b) highlighted that a higher number of categories will lead to a more accurate estimation of economic impacts, as accurate spending data can increase the validity and reliability of the economic estimates.

There are several items that can be used as dependent variables – expenditure of business tourists including registration fees, cost of international flight, cost of domestic flight, cost of hotel/accommodation and other lodging services and cost of

local/cultural tours. Apart from these, others such as local transportation, food and beverages, shopping and leisure activities can be used to identify the total average spending per tourist per event (Hussain, Kumar, Kannan & Nor, 2017). Surveys with 20 spending categories that normally have a smaller sample size cannot be used specifically in the analysis but can be accumulated to derive new categories with reasonable sample sizes (Moisey, Yuan, & McCool, 1990; Thrane, 2002). Literature shows that studies with 7 spending categories represent almost 85% of all spending that takes place in an economy. To measure the various areas that business tourists spend on during their business trip, it is pertinent to identify those areas because sometimes, tourists can spend unknowingly in areas which are not covered by economic impact research (Hussain et al, 2014).

### **Independent Variable —Destination and Psychological**

Demand is driven by push factors (endogenously) or pull factors (exogenously) (Laesser & Crouch, 2006). Psychological variables include type of destination, destination attractions, purpose of travel, psychological characteristics and evaluation of travel. In examining tourist taste based on importance of psychological characteristics, factors that attract, visiting purpose and evaluation of the travel were found to be major pull factors (Aguilo Perez & Juaneda Sampol, 2000; Hussain et al., 2017; Kumar & Hussain, 2014a). Destination-related variables such as activities offered at the destination also influence travel spending after controlling for income (Hussain et al., 2014; Jang, Bai, Hong, O’Leary, 2004). With regard to travel evaluation–destination type, available attractions and quality of tourist products offered at a particular destination are reflected to a certain degree in its price. Thus the price factor explicates why a particular destination is preferred over another which offers the same quality product with an affordable price (Chhabra, Sills & Rea, 2002; Henthorne, 2000; Hussain et al., 2014). At the macro level, the quality and characteristics of tourists products can have a huge effect on price and overall organisational revenue (Mak, Moncur, & Yonamine, 1977). We cannot assume the quality of a product from price only and perspective demand cannot be changed with actual spending by tourists. Previous studies also supported that the quality of tourism products can be measured through the evaluation of travel and the product itself by tourists. In addition, the mindset of tourists can also affect their spending (Chhabra et al., 2002). The facilities and activities available for tourists at a destination also influence travel spending. A number of studies also proved that the level of spending is associated with certain tourist activities at a destination (Jang, Cai, Morrison, & O’Leary, 2005; Laesser & Crouch, 2006; Pouta, Neuvonen, & Sievanen, 2006).

**Table 4** Destination and psychological-related variables

Studies	Destination Type	Destination Attractions	Purpose of Travel	Psychological Characteristics	Evaluation of Travel	Tourist Activities
Aguilo Perez & Juaneda Sampol (2000)	✓				✓	
Chhabra et al. (2002)					✓	
Henthorne (2000)					✓	
Hussain et al. (2014)		✓	✓	✓	✓	✓
Hussain et al. (2017)			✓	✓	✓	
Jang et al. (2005)						✓
Kumar & Hussain (2014a)	✓			✓	✓	
Laesser & Crouch (2006)		✓				
Thrane (2002)			✓			
Wang, Rompf, Severt, & Peerapatdit (2006)				✓		

**Independent Variable — Economic**

With regard to economic variables, income and price are the two most important factors for tourism, in particular, business tourism. Economic theory suggests that when an individual’s income increases, his/her demand for travel is also likely to increase. In general, tourism demand is income-elastic although travel demand for business, luxury, and VFR (visiting friends and relatives) are relatively less income-elastic than leisure travel demand (Bull, 1995).

The majority of studies reviewed have included income as an independent variable, where income refers to summative household income, gross annual income, total income of the visiting party, disposable income, total household spending, wage rate, etc. For economic analysis–modelling, it is important to keep income as a continuous variable instead of a categorical variable. However in reality, the majority of respondents avoid confirming their actual income, which results in a lower response rate. Therefore, it is advisable to collect income as a categorical variable (Downward & Lumsdon, 2003). Price is also another crucial determinant of tourism spending; demand never changes with any other factor but it increases when prices go down (Tribe, 2005). Literature also illustrates that perception also has an effect on spending; one who perceives a destination to be expensive tends to spend more money as compared to others (Aguilo Perez & Juaneda Sampol, 2000).

**Table 5** Economic and socio-demographic variables

Studies	Income	Price	Age	Gender	Marital Status	Nationality	Occupation	Education Level
Aguilo Perez & Juaneda Sampol (2000)		✓	✓			✓	✓	
Cannon & Ford (2002)	✓				✓	✓		✓
Downward & Lumsdon (2002)	✓		✓					
Hussain et al. (2014)	✓		✓	✓	✓	✓		✓
Hussain et al. (2017)	✓		✓	✓	✓	✓		
Jang et al. (2005)	✓							
Kumar & Hussain (2014a)	✓	✓			✓	✓		
Laesser & Crouch (2006)						✓		
Mak et al. (1977)	✓	✓	✓		✓			✓
Nicolau & Mas (2005)	✓		✓		✓			✓
Thrane (2002)	✓		✓	✓		✓		
Wang et al. (2006)	✓		✓	✓	✓			

**Independent Variable—Demographic**

Besides the economic variable, it is also important to take into account the socio-demographic variable for micro-economic analysis. Literature shows that socio-demographic features, specifically age and marital status, affect a business tourist’s spending. Therefore, it is necessary to look at behavioural patterns along with spending patterns of tourists while conducting micro-economic analysis. Agarwal & Yochum (2000) found in their research that while gender is not a substantial determinant of spending, age is the most significant and determining factor. Mak et al. (1977) also highlighted that single tourists spend more than married tourists. This was however, in contrast to Cannon & Ford’s (2002) and Wang et al.’s (2006) work that confirmed spending and marital status were unrelated.

**Table 6** Influence of age on spending

Studies	Age factor
Agarwal & Yochum (2000)	Age doesn’t have any influence on spending
Aguilo Perez & Juaneda Sampol (2000)	Tourist aged 30 or below spend less
Chhabra et al. (2002)	Age doesn’t influence spending

**Table 6** (con't)

<b>Studies</b>	<b>Age factor</b>
Hussain et al. (2017)	Age influences spending
Mak et al. (1977)	Tourist aged 40 or above spend more
Thrane (2002)	Older tourists spend more than young tourists
Wang et al. (2006)	Young tourists spend more than older tourists

**Table 7** Influence of marital status on spending

<b>Studies</b>	<b>Marital status factor</b>
Cannon & Ford (2002)	Marital status doesn't have any influence on spending
Hussain et al. (2017)	Marital status influences spending
Nicolau & Mas (2005)	Married tourists spend less than single tourists
Wang et al. (2006)	Marital status doesn't have any influence on spending

### **Conclusion and Implications**

Business tourism has grown into an important economic sector in many regions throughout the world. For the sustainability and ongoing contribution of business tourism, it is important to examine closely demand for business tourism at the micro or macro level. At both levels, a large number of economic, social, political and psychological factors affect the demand. Compared to studies at the macro level, micro-economic models have the advantage of closely mimicking theoretical economic consumer models and they can include the diversity and heterogeneity of consumer behaviour that is often cancelled out when aggregate information is used. The present research reviewed 31 studies on modelling tourist spending, and presents the following conclusion and recommendations for future research.

Macro level analysis are often conducted to examine international travel demand and tourists' spending, which requires figures on total tourist arrival and spending. However, every destination is different from another in terms of spending, consumption, behaviour and spending patterns. Therefore, researchers look at spending at the micro level and utilise modelling techniques instead of multiple regression. The present study analysed literature on tourists' spending including, sample size, models, and variables used. It found that destination, psychological, economic-income and demographic characteristics are the most commonly used variables for economic analysis.

The study also observed that tourist expenditure-related studies at the micro level are very common in the western world while on the other hand, the Asian literature, especially the Asia-Pacific region, lacks research work on tourist spending and its impacts on a particular destination. This is a major issue of concern considering that understanding the consumption and spending patterns of tourists in these developing nations/destinations will be highly valuable for continuous product development and suitability.

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